

What is claimed is:

1. A paste application apparatus comprising:

5 a Y-axis movement table configured to place a substrate thereon and to be capable of moving the substrate in a Y-axis direction;

a Y-axis movement mechanism extending in the Y-axis direction;

a head mechanism main unit extending in an X-axis direction, the head mechanism main unit being movable in the Y-axis direction by the Y-axis movement mechanism; and

10 a syringe provided on the head mechanism main unit, the syringe being disposed above the substrate and rendered movable in the X-axis direction, the syringe containing paste,

wherein an application of paste contained in the syringe to a surface of the substrate is made by relative movement of the syringe and the substrate.

2. The paste application apparatus according to claim 1,

wherein a pair of the Y-axis movement mechanisms are provided on both sides of the Y-axis movement table, and

20 the head mechanism main unit is placed on the pair of the Y-axis movement mechanisms, the head mechanism main unit being formed so as to straddle the Y-axis movement table.

3. The paste application apparatus according to claim 1,

25 wherein a plurality of the syringes are provided on the head mechanism main unit.

4. The paste application apparatus according to claim 3,

wherein the plurality of the syringes are configured so as to be capable of applying paste to the substrate while moving independently of

each other.

5. The paste application apparatus according to claim 4,

wherein the plurality of the syringes are configured so as to be  
5 capable of applying paste to the substrate at the same time while moving in  
mutually opposite directions on an X axis.

6. The paste application apparatus according to claim 1,

wherein a plurality of the head mechanism main units are placed on  
10 the Y-axis movement mechanism, and

each of the head mechanism main units is provided with the syringe  
respectively.

7. A paste application method comprising:

15 preparing a paste application apparatus, the paste application  
apparatus including a Y-axis movement table configured to place a substrate  
thereon and to be capable of moving the substrate in a Y-axis direction, a  
Y-axis movement mechanism extending in the Y-axis direction, a head  
mechanism main unit extending in an X-axis direction, the head mechanism  
20 main unit being movable in the Y-axis direction by the Y-axis movement  
mechanism, and a syringe provided on the head mechanism main unit, the  
syringe being disposed above the substrate and rendered movable in the  
X-axis direction, the syringe containing paste, the paste application  
apparatus being configured to apply paste contained in the syringe to a  
25 surface of the substrate by relative movement of the syringe and the  
substrate;

performing the relative movement of the substrate and the syringe in  
the Y-axis direction while forming an application pattern by use of the Y-axis  
movement table; and

30 performing the relative movement of the substrate and the syringe in

the Y-axis direction while moving the syringe from an ending position of an application pattern to an starting position of a subsequent application pattern by moving the substrate and the syringe in mutually opposite directions by use of the Y-axis movement table and the Y-axis movement  
5 mechanism.

8. A paste application method comprising:

preparing a paste application apparatus, the paste application apparatus including a Y-axis movement table configured to place a substrate  
10 thereon and to be capable of moving the substrate in a Y-axis direction, a Y-axis movement mechanism extending in the Y-axis direction, a head mechanism main unit extending in an X-axis direction, the head mechanism main unit being movable in the Y-axis direction by the Y-axis movement mechanism, and a syringe provided on the head mechanism main unit, the  
15 syringe being disposed above the substrate and rendered movable in the X-axis direction, the syringe containing paste, the paste application apparatus being configured to apply the paste contained in the syringe to a surface of the substrate by relative movement of the syringe and the substrate; and

20 performing the relative movement of the substrate and the syringe in the Y-axis direction by moving the substrate and the syringe in mutually opposite directions by use of the Y-axis movement table and the Y-axis movement mechanism.